Volume 19 Numbers 1–6 January/December 1995

Journal of Medical Engineering & Technology

An international bimonthly journal promoting the application of engineering and technology in medical research and clinical medicine

Editor

Dr R. E. Trotman
c/o Taylor & Francis Ltd
4 John Street
London WC1N 2ET

Editorial Committee

Dr D. L. Bader
Department of Materials
Queen Mary & Westfield College
London E1 4NS

Dr T. Clutton-Brock
University Department of Anaesthesia
Queen Elizabeth Hospital
Birmingham B15 2TH

Dr A. D. Cunningham
Department of Biomedical Engineering
Royal Brompton National Heart & Lung Institute
London SW3 6NP

Dr P. C. Jackson
Department of Medical Physics & Bioengineering
Bristol General Hospital
Bristol BS1 6SY

Dr J. A. Newell
School of Computer Science
University of Birmingham
Birmingham B15 2TT

Dr C. E. E. Thornett
Microtechnology Support Services
The Spastics Society
Meldreth Manor School
Meldreth
Royston SG8 6LG

Assistant Editors

Dr E. J. Lindley
(News & Contents)
IBEES
Lodge Moor Hospital
Sheffield S10 4LH

Dr S. J. Meldrum
(Book Reviews)
Department of Medical Physics & Bioengineering
Norfolk & Norwich Hospital
Norwich NR1 3SR

Dr D. Whelpton
(Evaluation)
Medical Equipment Management Department
King's Mill Hospital
Sutton-in-Ashfield NG17 4JL

Taylor & Francis
London • Washington, DC

Contents of Volume 19 (1995)

NUMBER 1 JANUARY/FEBRUARY 1995

A new method of comparative bone strength measurement
A. J. Hamer, J. R. Strachan, M. M. Black, C. Ibbotson and R. A. Elson 1

An accurate 3-D model for magnetic stimulation of the brain cortex
G. Cerri, R. De Leo, F. Moglie and A. Schiavoni 7

Performance of angiographic catheters
I. Marshall and R. J. Sellar 17

Calendar 23

Selected contents 24

Book review 28

Books received 29

Evaluation 30

News, trends & techniques 34

New products 38

NUMBER 2–3 MARCH–JUNE 1995

Preface 41

Use of DC recording in the demonstration of functional specialization
S. H. Curry and C. Pleydell-Pearce 42

Non-invasive multielectrode array for high resolution sampling of scalp-recorded potential fields
R. Budai, G. Contento, T. Locatelli and G. Comi 52

Measurement of the activating function of magnetic stimulation using combined electrical and magnetic stimuli
C. W. Garnham, A. T. Barker and I. L. Freeston 57

A new procedure for the registration of the visual-evoked cortical potential by multichannel recording of the gradient distribution
G. Sporckmann, J. Silny and G. Rau 62

Event-related potential map differences depend on the prestimulus microstates
I. Kondákor, R. D. Pascual-Marqui, C. M. Michel and D. Lehmann 66

Temporal segmentation and multiple-source analysis of short-latency median nerve SEPs
P. Ravazzani, G. Tognola, F. Grandori, R. Budai, T. Locatelli, M. Cursi, G. Di Benedetto and G. Comi 70

Monitoring evoked potentials during surgery to assess the level of anaesthesia
C. Jordan, C. Weller, C. Thornton and D. E. F. Newton 77

Automatic perimetry and visual P300: differences between upper and lower visual fields stimulation in healthy subjects
M. Fioretto, E. Gandolfo, C. Orione, M. Fatone, S. Rela and W. G. Sannita 80

NUMBER 4 JULY/AUGUST 1995

Approaching comparability and results of pulsatile flow *in vitro* testing of prosthetic heart valves
V. Barbaro, G. Boccanera, C. Daniele, M. Grigioni and A. Palombo 115

Instrumentation of a mobilization couch for dynamic load measurement
M. C. Harms, A. M. Milton, G. Cusick and D. L. Bader 119

Physical strain and mechanical efficiency in hub-crank and handrim wheelchair propulsion
L. H. V. van der Woude, E. van Kranen, G. Ariëns, R. H. Rozendal and H. E. J. Veeger 123

Calendar 132

Selected contents 133

Book reviews 136

Evaluation 139
News, trends & techniques 141
New products 145

NUMBER 5 SEPTEMBER/OCTOBER 1995

Cardiovascular applications of biomaterials and implants—an overview
M. M. Black 151

Noise coherence in closely-spaced electrodes: the implications for spatial averaged ECG recordings
I. N. Turner, W. Wang, M. J. English and R. Vincent 158

An automated system for the functional evaluation of oscillometric non-invasive blood pressure monitors
W. B. Geake, J. N. Amoore and D. H. T. Scott 162

Calendar 177

Selected contents 179

Book reviews 183

News, trends & techniques 185

New products 189

NUMBER 6 NOVEMBER/DECEMBER 1995

Guest editorial
S. J. Meldrum 191

The origin and significance of secondary flows in the aortic arch
M. M. Black, D. R. Hose and P. V. Lawford 192

The application of an Actel field programmable gate array in the design of an ECG RR interval recorder
A. Harrison, B. R. Hayes-Gill, J. A. Crowe and S. T. Chang 198

The application of engineering and technology in the management of diabetes
D. J. Claremont 205

Scheduled inspection of electromedical equipment planning and assessment
J. N. Amoore, D. G. Stay and J. Mather 211

Calendar 219

Selected contents 221

Book reviews 226

News, trends & techniques 228

New products 234